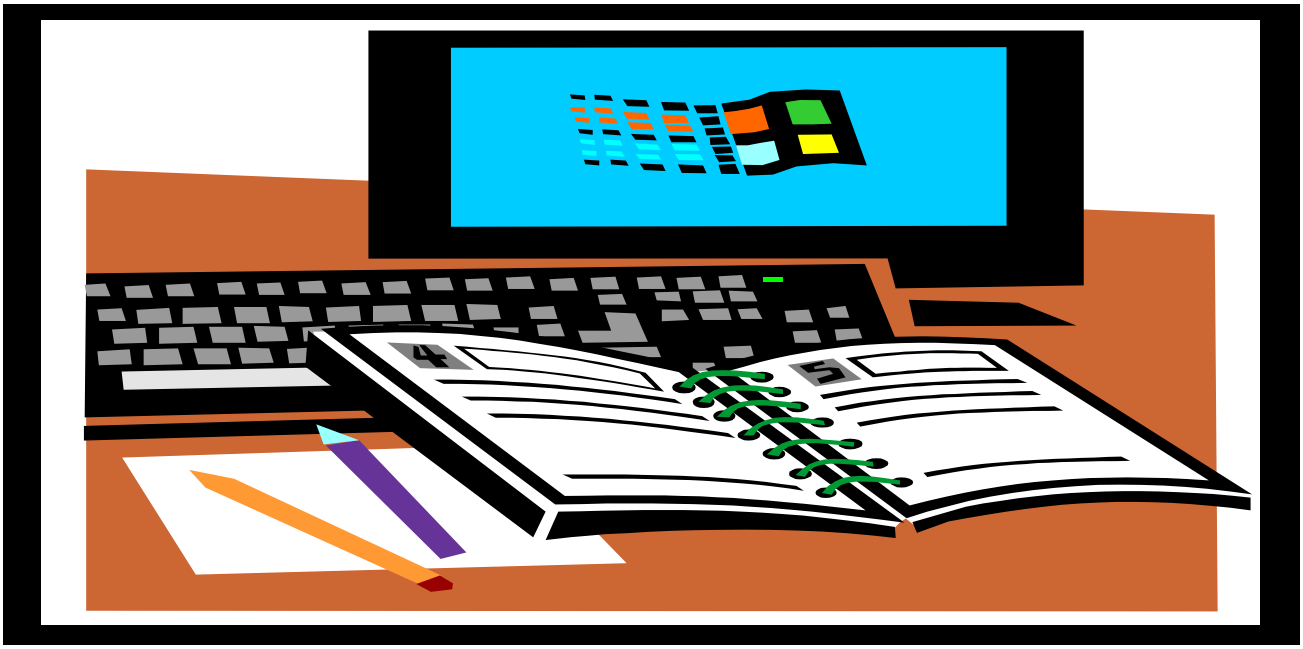
Magnet School
Annual Report



2013-2014

Aerospace / Hydrospace Engineering and Physical Sciences
High School
Name of School

840 Old Town Rd
Bridgeport, CT 06606
Address

(203) 275-3343
Phone

jlipp@bridgeportedu.net
E-Mail

Jay Lipp
Director or Principal

Participating (formally) School Districts

Bridgeport
Easton / Redding
Fairfield
Shelton
Stratford
Milford
Monroe
Trumbull

Contents

Information for Statewide Policymakers

2013-14 continued to be a year of unprecedented inquiry into statewide interdistrict magnet schools by a range of policy groups and those holding the ultimate legislative and budgetary authority over our statewide program. The Connecticut General Assembly continues to require the CSDE to produce a Results-based Accountability template for determining program effectiveness and a comprehensive magnet school plan with specific recommendations for supporting and sustaining the program. In order for the CSDE to be able to answer specific questions to ensure the program's long-term viability, we request information on the following objectives:

1) *Describe the methods used to ensure recruitment and retention of a diverse student body, and how the demand for your program translates into sustained interest in the school. Please include any specific efforts in reaching families that may not yet be familiar with school choice programs. (Note: not applicable for those schools who were required to submit an enrollment management plan in the spring of 2014 due to non-compliance)*

   A series of informational and recruitment sessions were offered to prospective students and their families during the spring of 2013. These sessions were held in all districts in a variety of locations, were very well attended and produced the applicants included in the lottery for the inaugural year. Additional recruitment activities included advertisements in local Fairfield/New Haven County papers, the CT Post, informational brochures placed in multiple high traffic venues and the establishment of our current website (www.fairchildwheeler.org) on July 1, 2013.
   Added to these layers of information distribution, school counselors from the 8th grade feeder schools were informed of the school and encouraged to reach out to the 8th grade families.
   The diverse student body is maintained both by the positive school climate and by the many unique opportunities, unavailable at districts' schools, which are provided to the students and parents. Increased demand for our academic program has been confirmed by the number of applications from the 2014 lottery. In 2013, a total of 724 applications were received. In 2014, a total of 892 applications were received.

2) *Describe your school's professional development priorities for 2013-14. Be specific as to activities that support your special magnet theme.*

   FCW is a new school with a predominately new staff. It is essential that all stakeholders understand the school's overall vision and mission, as well as the components necessary for the realization of the vision.. All staff participated in professional development that allowed us to lay the foundation on which our vision for magnet

theme development and curriculum will stand. It is essential that our standards for excellence are clear. Therefore, the professional development offered is ongoing and sustained. Magnet Resource Teachers, our local Regional Education Service Central and University Partners (as indicated on written agreements and MOUs) will continuously offer support and professional development as our school and staff collectively lay the building blocks for success and accountability.

Professional Development:

All teachers received PD in:

- STEM-related subjects
- Creating challenge projects
- CCS (CT Core Standards) and SBAC (CT Standardized Assessment Consortium)
- Understanding by Design
- Working Collaboratively and Building a Community of Learners
- Creating Formative and Summative Assessments
- Developing Rubrics
- Differentiation and Scaffolding
- Developing Interdisciplinary Units and Lessons

PD/ Structured Support:

During planned Professional Learning Community (PLC) times (40 minutes per day) teachers will work collaboratively to plan theme-based interdisciplinary core units of study that are aligned to state standards. Cooperative Educational Services staff and Magnet Resource Teachers will support the research, planning, and drafting of the lessons and units.

PD/Mentoring :

University partners provided a three-day seminar over the summer to introduce new hires to the STEM vision, standards, magnet-themed instruction, interdisciplinary units of study that embed discrete magnet themes and improving the quality of instruction to promote success for all. Theses mentors continue to offer 24 additional hours throughout September to support and coach teachers of discrete magnet courses and new hires.

What does your school do uniquely well (related to your magnet theme) that you think other regular public schools may replicate on the local level or in other public schools?

University Professors/ Teacher Co-Authoring:

University professors who teach the discrete magnet courses at the college level paired with our teachers to create discrete magnet courses, units of study, lessons and project based learning activities for our high school students. Through this unique opportunity, traditional core teachers engaged in rigorous research, study and evaluation. This unique union, in addition to resulting in courses and units, also created educators specialized in particular magnet themed content. The professors will serve as mentors to the educators as the courses are introduced to students. Teachers and university professors will continue to work collaboratively throughout grant year one to revise units and lessons to ensure student engagement, relevancy and that the lessons are tailored to meet the specific needs of all students in the class.

Understanding by Design:

The emphasis of UbD is on what Wiggins and McTighe refer to as "backward design" (also known as "backwards planning"). Teachers have been trained to look at the outcomes in order to design curriculum units, project-based learning activities and classroom instruction. The Understanding by Design frames for our curriculum designers units of study, lesson plan templates, and assessments that will lead our students to a deeper understanding of the magnet content in both magnet integrated core and discrete courses. The Understanding by Design framework encourages teachers to create units and lessons that allow students to explain, interpret, apply, have perspective, empathize, and have self-knowledge about a given topic, while remaining true to state standards and best practices. Our relevant, 21st century curriculum aims to engage students by remaining relevant, current and accessible in order to achieve our goal of student mastery of magnet content.

Curriculum Alignment, Development and Implementation:

It is the vision of the FWC community to develop units in the core classes that are driven by the discrete magnet themes in our magnet school. Due to the adoption of the CCSS (now referred to CSS in CT) we are allowed to creatively select "complex" texts that align with our themes and that our units are aligned to state standards. This flexibility of content will allow our students to be fully immersed in the magnet theme, resulting in increased magnet "dosage". Therefore, it is important to note that the authoring of the new curriculum and core units will be dependent upon the creation of the discrete magnet courses from which our interdisciplinary teams will be able to pull specific content and embed in core units of study. Our curriculum will therefore be unique, relevant and aligned to the state and magnet standards.

3) Describe the manner in which you promote replication of your school's best practices with regular public schools.

The vision for college and career readiness is exemplified in our thoughtful approach to the educational and experimental pathways design offered to our students. Students, in addition to core courses and receiving the appropriate number of Carnegie units according state standards, will receive discrete magnet courses relevant to the magnet theme in either the Aerospace or Hydrospace Engineering pathway. Each course serves as a prerequisite to the next, culminating in a capstone project and internship opportunities that will ultimately prepare students for post-secondary education and employment opportunities. These career pathways will allow our students to be better prepared for college and beyond in the STEM areas. This purposeful planning structure of academic focus through pathways has been shared with other district high schools that have planned to adopt the concept at their schools.

In addition the magnet and core courses, Aero/Hydro students will be offered the opportunity to enroll in Early College Experience course for college credits. The Fairchild Wheeler administrators and teachers have identified ECE courses in varied disciplines that will be offered to our students. These ECE courses will follow the same curriculum and rubrics that have been designed by the university. By taking ECE courses our students will not only earn college credit but will also be introduced to college level work that will better prepare them for higher education. The practice of offering students Early College Credit courses is becoming more common among the district's schools.

4) Describe your school's two greatest challenges/obstacles to meeting or exceeding the school-wide student learning goals in 2014-15. Please include ways in which the CSDE may support our school in meeting these challenges through enhanced professional development opportunities or specific technical assistance on matters needing close attention.

In our first year of operation, one of the greatest obstacles we faced in meeting our school-wide learning goals was the lack of standardized data available on our students and a cohesive plan to institute SRBI. The 2014-15 school year has brought the tool to benchmark all students in the areas of numeracy and literacy in order to tailor the curriculum to meet the specific needs of our students and a PLC plan to read data and make decisions with regard to their academic and social success. With regard to this instrument, our teams of teachers will be able to make data-based decisions in order to promote student success and growth over time. The obstacles are: providing the appropriate interventions and differentiated strategies once our students are identified in tiers and having the resources available to ensure that all students are moving towards grade level proficiency. CSDE could support high school educators by providing professional development in SRBI and the use interventions and/or differentiated techniques to implement in our heterogeneous classrooms.

5) Provide the number of applications received by grade and town of residence; as of date of lottery.

Total Applicants
2013-2014 Lottery

Number of Applicants by Grade	
Grade 9	528
Grade 10	196

Town of Residence	
Ansonia	1
Bridgeport	592
Easton	2
Fairfield	10
Milford	14
Monroe	6
Sandy Hook	1
Shelton	17
Southport	3
Stratford	43
Trumbull	35

6) Provide the number of students on wait list/pool by grade, race and residence; as of October 1, 2013, (see note)

Note: Wait list/pool refers to those students not enrolled in your school or another interdistrict magnet school who applied for admission to your school for the 2013-14 year. Example: any student who entered a lottery for admission to your school as a first choice that ultimately not placed in any interdistrict magnet school.

Wait List Pool
2013-2014 Lottery

Number per Grade	
Grade 9	249
Grade 10	49

Number per Race / Ethnicity	
Asian	8
Black	111
Hispanic	104
Pacific Islander	1
White	16
Unclassified / other	9

Town of Residence	
Bridgeport	249

Financial Information

DIRECTIONS: Provide, as attachments, Schedules 1 and 2 from the attached expenditures and revenues document. These should reflect *actual expenditures and revenues* by the close of 2013-14, and not merely the budgeted amounts from the onset of the school year submitted in your grant application.

Basic Checklist for Title IX and 504/ADA Compliance

Both Title IX (34 CFR § 106.9) and Section 504 (34 CFR § 104.8) require that educational entities that receive federal funds must have a policy on nondiscrimination and a published statement. The publication of this statement notifies applicants, students, employees and parents that it does not discriminate on the basis of race, color, national origin, sex, or disability. Schools and educational agencies that receive federal funds must list the Coordinators of Section 504 and Title IX with their name/title, address and phone number in the notice of nondiscrimination.

The following checklist was prepared to assist you in meeting some minimum requirements of Title IX of the Education Amendments of 1972, Section 504 and the Americans with Disabilities Act. It is not an exhaustive checklist and therefore should not be used as a substitute for careful reading of the regulations themselves.

§ 106.8 Designation of responsible employee and adoption of grievance procedures.

1. X At least one Title IX coordinator has been designated at the district or school level to coordinate efforts to comply with Title IX, including investigations of any complaints.
2. X At least one Section 504/ADA coordinator has been designated at the district or school level to coordinate efforts to comply with Section 504/ADA requirements, including investigations of any complaints.
3. X All students and employees have been notified of the name(s), office address(es), and telephone number(s) of the coordinator(s).
4. X Grievance procedures for students have been adopted and published.
5. X Grievance procedures for employees have been adopted and published.

(Authority: Secs. 901, 902, Education Amendments of 1972, 86 Stat. 373, 374; 20 U.S.C. 1681, 1682)

§ 106.9 Dissemination of policy.

6. The following been notified of a policy of nondiscrimination.
   X applicants for admission and employment
   X students and parents of students
   X employees
   X sources of referral of applicants
   X unions, professional organizations

7. Notification of a policy of nondiscrimination has been placed in one or more of the following:
   ☐ local newspapers
   ☐ school newspapers and magazines
   X memoranda's or other written communications distributed annually to each student and employee

X announcements, bulletins, catalogs, student and faculty handbooks
X application forms

8. X The above-listed school publications are free of text and illustrations suggesting differential treatment on the basis of sex or disability.

9. X Admission and recruitment representatives (including counselors or student advisors and personnel officers) have been advised of the nondiscrimination policy and requirements for adherence to the policy.

(Authority: Secs. 901, 902, Education Amendments of 1972, 86 Stat. 373, 374; 20 U.S.C. 1681, 1682); [45 FR 30955, May 9, 1980, as amended at 65 FR 68056, Nov. 13, 2000]

Magnet School Name: Aerospace/Hydrospace Engineering & Physical Sciences High School **District/School Code:** 015

SCHEDULE 1: Total Current Expenditures from All Sources by Function and Object

Report All Cash Expenditures and Encumbrances from All Sources Regular and Special Education.

			OBJECT**						
LINE	CODE	FUNCTION (Program Area)**	Total * (Col. 1)	Salaries (Col. 2)	Employee Benefits (Col. 3)	Purchased Services (Col. 4)	Supplies (Col. 7)	Property (Col. 8)	Other (Col. 9)
1202	1000	Program Expenditures	1,098,403	791,145	212,310	38,976	55,972	0	0
1203	2100	Support Services – Students	0	0	0	0	0	0	0
1204	2200	Improvement of Instructional Services	0	0	0	0	0	0	0
1205	2300	Support Services - General Admin.	250	0	0	200	50	0	0
1206	2400	School Based Administration	255,056	247,784	0	0	7,272	0	0
1207	2600	Operation and Maintenance of Plant Svc.	242,184	40,000	25,000	167,184	10,000	0	0
1208	2700	Student Transportation Services	250,701	0	0	250,701	0	0	0
1209	2500 2900	Support Services	65,000	40,000	25,000	0	0	0	0
1210	3100	Net Expenditures for Food Services							
1211	3200	Net Expenditures for Enterprise							
1212		Indirect Overhead							
213	TOTAL		1,911,594	1118929	262,310	457,061	73,294	0	0

*Do not include transportation costs associated with home to school and back home or the excess cost of special education services.

**Definitions of objects and functions are to be consistent with those on expenditure report ED001.

Magnet School Name: Aerospace/Hydrospace Engineering & Physical Sciences High School

District/School Code: 015

SCHEDULE 2: Revenues by Source		
Include all projected revenues for the school		
LINE	**CODE DESCRIPTION**	**Total Revenue (Col. 1)**
220	xxxx State Magnet Operating Grant	
		958,270
	xxxx Other State Grants (please list below)	
221	xxxx Other Federal Grants	
222	1920 Contributions	
226	xxxx Other Sources of Revenue (list below, include tuition if	
	Operating Budget	953,324
299	Total	1,911,594